STHIRAŚRĪ GLOBAL MERIDIAN

WHERE CAPABILITY MEETS COMMERCE · EXPORT HOUSE

CORPORATE CAPABILITY PROFILE

REF: SGM-CORP-CAP-2026-V1.0
VALID FOR GLOBAL PROCUREMENT

1. CORPORATE EXECUTIVE SUMMARY & EXPORT ARCHITECTURE

INDEPENDENT ENGINEERING EXPORT HOUSE

STHIRAŚRĪ GLOBAL MERIDIAN is an engineering-driven export house supplying mission-critical replacement internals for industrial rotating equipment. We bridge international plant operators, pump service centers, and OEM aftermarket providers with India's audited precision manufacturing ecosystem. Sthirashri operates with complete technical, commercial, and legal accountability from 2D/3D drawing intake through final seaworthy delivery under Incoterms® 2020.

24 Hours	±0.01 mm	Ra ≤ 0.4 µm	EN 10204 3.1	HS 841391
DRAWING FEASIBILITY REVIEW	MACHINING FIT TOLERANCES	BEARING / SEAL SEATS	CERTIFIED MTC HEAT TRACE	CUSTOMS TARIFF CODE

2. CORE PRECISION INTERNALS PORTFOLIO

ROTATING EQUIPMENT REPLACEMENT COMPONENTS

Precision Impellers

Configurations: Closed, semi-open, open, and multi-stage impellers up to Ø800 mm.
Hydrodynamics: Vane profiles CNC-matched to original hydraulic performance.
Dynamic Balance: ISO 1940 Grade G2.5 / G1.0 certification report provided.

Shafts & Protective Sleeves

Tolerances: Stepped pump drive shafts with Total Indicated Runout (TIR) ≤ 0.015 mm.
Journals: Cylindrically ground bearing and mechanical seal seats to Ra ≤ 0.4 µm.
Hard-Facing: Optional Stellite, ceramic, and plasma spray wear-resistant coatings.

Wear Rings & Bushings

Assemblies: Casing wear rings, impeller wear rings, center-stage & throttle bushings.
Clearances: Diametrical clearances held to ±0.01 mm preventing fluid recirculation.
Metallurgy: Anti-galling alloy pairings (50 HB hardness differential).

3. METALLURGICAL CAPABILITY MATRIX

100% SPECTROMETRICALLY VERIFIED MELT HEATS

ALLOY CLASSIFICATION	STANDARD GRADES (ASTM / DIN / EN)	TYPICAL INDUSTRIAL APPLICATIONS
Austenitic Stainless Steel	SS 304, SS 316, SS 316L, CF8, CF8M (1.4404, 1.4408)	Process chemicals, demineralized water, boiler feed, refinery services.
Duplex & Super Duplex	Duplex 2205 (1.4462 / 4A), Super Duplex 2507 (1.4410 / 5A)	Seawater desalination (RO), offshore oil & gas, chloride-rich slurries (PREN > 40).
Martensitic Stainless Steel	13Cr SS 410, SS 420, CA15, CA40 (1.4006, 1.4021)	High-pressure hydraulic turbine runners, high-velocity boiler feed impellers.
Copper & Bronze Alloys	Aluminium Bronze AB2 (C95800), Phosphor Bronze, Gunmetal	Marine cooling, firewater systems, cavitation-prone cooling water circuits.
Exotic Superalloys	Hastelloy C-276, Inconel 625, Monel 400, Titanium Gr. 2	Nuclear facilities, extreme acid slurries (H2SO4, HCl), subsea injection.

4. AUDITED PARTNER MANUFACTURING ECOSYSTEM

QUALIFIED INDIAN PRECISION FACILITIES

Machining Capabilities & Envelope

- **Multi-Axis CNC Lathes:** Turning envelopes up to Ø1,200 mm diameter • 3,000 mm length.
- **4-Axis & 5-Axis VMC Milling:** Continuous 5-axis impeller vane contouring.
- **Precision Grinding:** Cylindrical & internal bore grinding holding Ra ≤ 0.4 µm.
- **Dynamic Balancing:** Hard-bearing computerized dynamic balancing rigs.

Foundry & Casting Integrity

- **Investment Casting (Lost-Wax):** Ultra-smooth hydraulic vane surface finishes.
- **No-Bake Resin Sand Casting:** Heavy-duty single/multi-stage pump casings.
- **Centrifugal Casting:** Dense, void-free wear rings, bushings, and sleeves.
- **Forgings:** Ultrasonic-tested forged bars for high-torque drive shafts.

5. UNCOMPROMISING QUALITY ASSURANCE & COMPLETE TRACEABILITY

THE 4 MANDATORY REPORTS

Mandatory Technical Deliverables (Standard)

1. **MTC EN 10204 3.1:** Optical emission spectrometry and mechanical tensile/hardness data.
2. **Dimensional Inspection Report (DIR):** 100% CMM point-by-point verification.
3. **Surface Roughness (Ra):** Calibrated profilometer reports for all critical seats.
4. **Certificate of Conformance:** Formal commercial guarantee of drawing compliance.

Specialized NDT & Third-Party Testing (On Request)

- **Liquid Dye Penetrant (DPT)** per ASME Sec V • **Magnetic Particle (MPI)**.
- **Ultrasonic Testing (UT)** for volumetric integrity • **Radiography (RT)**.
- **Hydrostatic Pressure Testing** up to 1.5x design pressure.
- **Third-Party Inspection:** TÜV, DNV, Bureau Veritas, Lloyd's Register.

6. GOVERNANCE, INTELLECTUAL PROPERTY & STATUTORY CREDENTIALS

LEGAL & COMMERCIAL REGULATORY COMPLIANCE

Customer Intellectual Property & Mutual NDA: Customer engineering drawings, 3D CAD models, and proprietary specifications are protected under strict Non-Disclosure Agreements. Data is maintained in encrypted environments and shared only with vetted manufacturing partners on an audited need-to-know basis.

Official Statutory Trade Registrations

- **DGFT IEC Exporter:** Registered Indian Exporter (Ministry of Commerce).
- **Customs Tariff Code:** HS 841391 (Parts of Pumps for Liquids).
- **GSTIN Registered:** Compliant with Indian taxation & export LUT bonds.
- **Incoterms® 2020:** Worldwide freight execution (FOB, CIF, CFR, DAP, DDP).

Global Engineering Desk & Communications

- **General Inquiries:** **contact@sthirashri.com**
- **Technical RFQ Desk:** **engineering@sthirashri.com**
- **Partner Network Desk:** **partner@sthirashri.com**
- **Operating Hours:** Mon – Sat: 09:00 – 18:00 IST (UTC+05:30) • 24h turnaround.

CORPORATE COVENANT • STHIRASRI (स्थिरश्री)

"Uniting steadfast Indian precision engineering with international industrial supply chains through uncompromising technical rigor (Sthira) and enduring commercial excellence (Shrī)."

Fair-Use OEM Legal Disclaimer: STHIRAŚRĪ GLOBAL MERIDIAN is an independent engineering export house providing precision-machined replacement pump components manufactured by audited Indian partner facilities. All component types, architectures, and descriptions are for technical identification and cross-reference purposes only. STHIRAŚRĪ is not affiliated with, sponsored by, or an authorized agent of any original equipment manufacturer.